

NOTE: The document identifier and heading have been changed on this page to reflect that this is a performance specification. There are no other changes to this document. The document identifier on subsequent pages has not been changed, but will be changed the next time this document is revised.

INCH-POUND

MIL-PRF-27/25B
8 April 1992
SUPERSEDING
MIL-T-27/25A
21 April 1976

PERFORMANCE SPECIFICATION SHEET

TRANSFORMERS, POWER, STEP DOWN, 3-PHASE, TYPE TP4S03YY312

This specification is approved for use by all Departments and Agencies of the Department of Defense.

The requirements for acquiring the product described herein shall consist of this specification sheet and the issue of the following specification listed in that issue of the Department of Defense Index of Specifications and Standards (DODISS) specified in the solicitation: MIL-T-27.

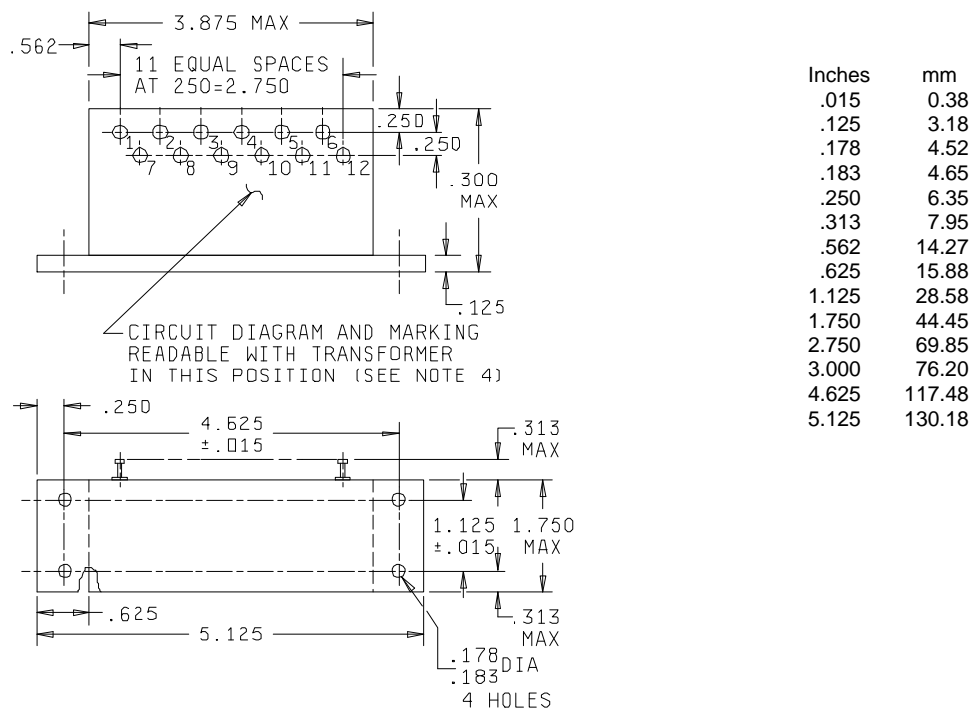
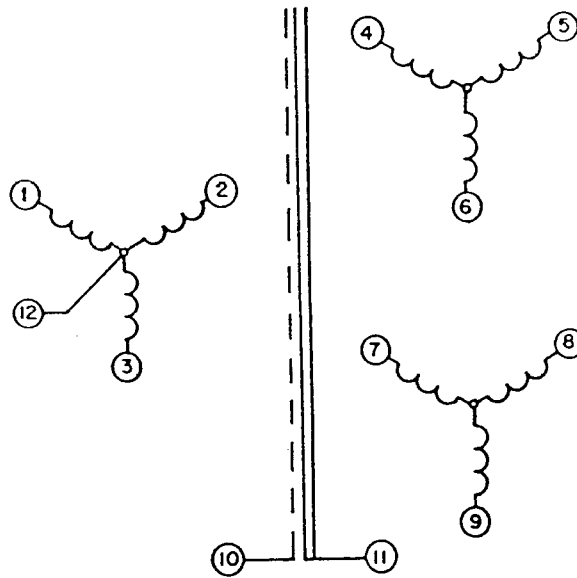


FIGURE 1. Dimensions and configurations.

(B) denotes changes



CIRCUIT DIAGRAM

NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for general information only.
3. Unless otherwise specified, tolerance is ± 0.030 (0.76 mm).
4. Marking: Type designation, military part number, manufacturers name or code symbol, circuit diagram, rated voltage and frequency of primary, rated voltages and currents of secondaries, working voltage and date code to be marked in the space specified on figure 1.

FIGURE 1. Dimensions and configurations - Continued.

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REQUIREMENTS:

Electrical ratings:

Primary voltage: 1, 2, 3, and 12 neutral, 115 volts rms line neutral, 3 phase, 400 Hz \pm 20 Hz.

Secondary voltage:

(4-5) (5-6) (6-4): 42 volts rms, 0.9 amperes, line to line, wye connected.

(7-8) (8-9) (9-7): 42 volts rms, 0.9 amperes, line to line, wye connected.

Working voltage: 175 volts maximum.

Design and construction:

Dimensions and configurations. See figure 1.

Duty cycle: Continuous.

Case:

Material: Metal, hermetically sealed.

Core: Connected to terminal number 11.

Terminals: Twelve solderable turret type capable of accepting a minimum of two number 18 AWG wires.

Terminal height: .312 inch maximum.

Weight: 3 pounds maximum.

Dielectric withstanding voltage (at sea level): 500 volts rms.

Electrical characteristics:

(B) No load: With 115 volts, 400 Hz \pm 20 Hz across terminals (12-1), (12-2), (12-3). Current 0.1 ampere maximum per phase; voltage across (4-5), (5-6), (6-4), (7-8), (8-9), (9-7) shall be 42 volts rms \pm 1 percent, respectively.

(B) Rated load: With 115 volts, 400 Hz across (1-12), (2-12), (3-12), voltage across (4-5), (5-6), (6-4), (7-8), (8-9), (9-7) shall be 42 volts rms +1 percent, -3 percent at 0.9 amperes per secondary leg.

Regulation: The output voltage of secondary windings (4-5), (5-6), (6-4), (7-8), (8-9), (9-7) shall not vary more than \pm 3 percent with load reduced from 0.90 amperes to 0.10 amperes.

Electrostatic shielding: Electrically and mechanically connected to terminal 10.

Temperature rise: Not more than 65°C when operated at 0.90 amperes per secondary leg.

Ambient temperature: -28°C to +65°C.

Marking location: See figure 1.

Part or Identifying Number (PIN): M27/25-1.

CONCLUDING MATERIAL

Custodians:

Army - ER
Navy - EC
Air Force - 85

Review activities:

Army - ER, MI
Navy - EC, SH
Air Force - 17, 80
DLA - ES

User activities:

Army - AR
Navy - AS, MC
Air Force - 19

Preparing activity:

Army - ER

Agent:

DLA - ES

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